

Soft Skills Development
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Lecture - 13
The Aural: Its Relevance and Impact

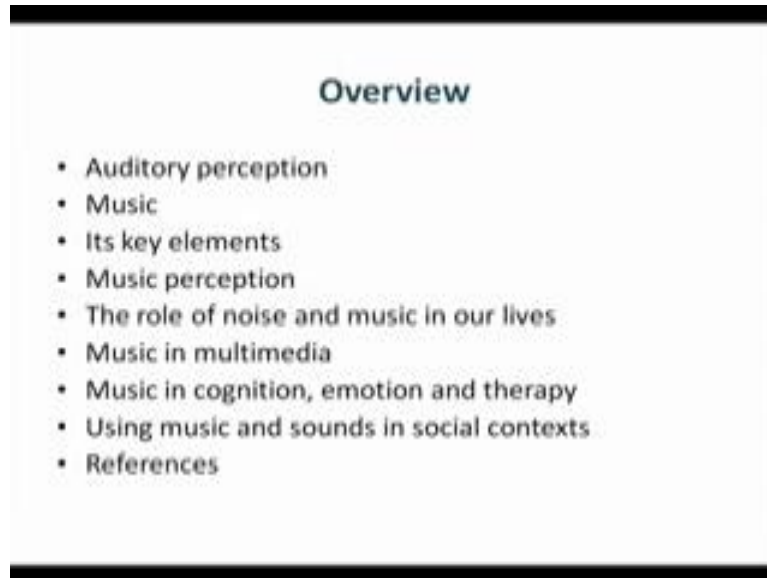
Hello friends. In today's talk, we will be dealing with music essentially, but we will also be dealing with sounds. Until now we have covered presentation and different dimensions of presentation skills, especially the visual dimension of presentation skills, but it is also important to identify the lost component which may or may not get very reflected, but which I have a feeling would take you a long way where you are making presentations in your absence or where you are extending your soft skills to other areas such as let say a party, which you are giving or may be an inaugural program or may be a particular let us say a particular shopping from complex or what is being played over there.

For instance, if you walk into a big shopping complex you will find that some music soft music is playing over there you may or may not be aware of it, but it creates a certain kinds of an ambience or you walk into a hotel or a restaurant, you find a certain kind of music over there. It is a very common experience if you go to some of the brands like; let say, pizza hut or dominos or somebody, something like subways, where in many cases you will find music playing. So, music does play a very significant role in the context of ambience. Sound plays a very significant role in the way we perceive things and we understand things.

So, today's focus begins with the necessity or the relevance of sound to begin within the context of presentations, but later on we move on to music as a communicating channel by itself and explore it a little further, because I am sure that after I have completed some of you might feel that it can be exploited in an interesting way. See one of the things is that when you do something which is unique, which is different, as you will get to learn when you complete the lessons or the talks, covered it talks on creativity. Uniqueness is something which is cherished which is released, which is understood and appreciated and it helps influence other people. So, music is something which might help you in that

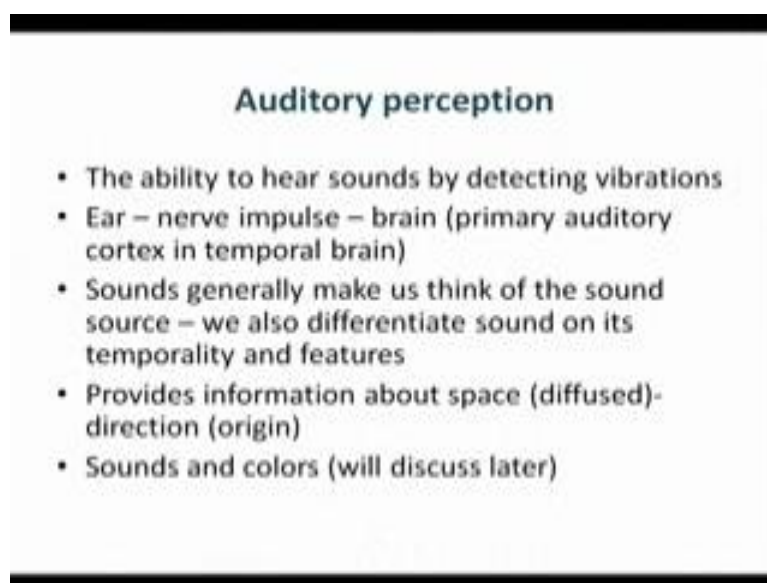
direction as well. So, giving you this background let me quickly give you an overview of what we are going to look at.

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We look at auditory perception very quickly music, it is key elements, music perception, the rule of noise and music in our lives, music in multimedia, music in cognition, emotion and therapy, using music and sounds in social contexts and with that we will complete this relatively brief exploration of this particular area.

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Auditory perception; if you are looking at the mechanism involved; ability to hear sounds by detecting vibrations, you have the ear of which generates a nerve impulse and this is processed by the primary auditory cortex in the temporal side of the brain, sounds generally make us think of sound source. So, after the technicality we need to understand how we generally look at sound, how do we generally explore sound. When you smell something you have the feeling that the smell is associated with a source. When you hear something, we were generally thinking of not the sound by itself, but you are usually closing your eyes and trying to identify the source.

For instance, let us say that, I make a tapping noise and you are trying to immediately associate it with let say my touching the table with a pen or if I make a noise like this which you can faintly hear, you will immediately try to identify from which particular place this particular noise is coming. Source location, the tendency to search for the source is a very interesting aspect of the way we perceive sound. Perception of the sound is also has to other components; speciality and temporality. It provides information about space or a sound can be coming from all sides.

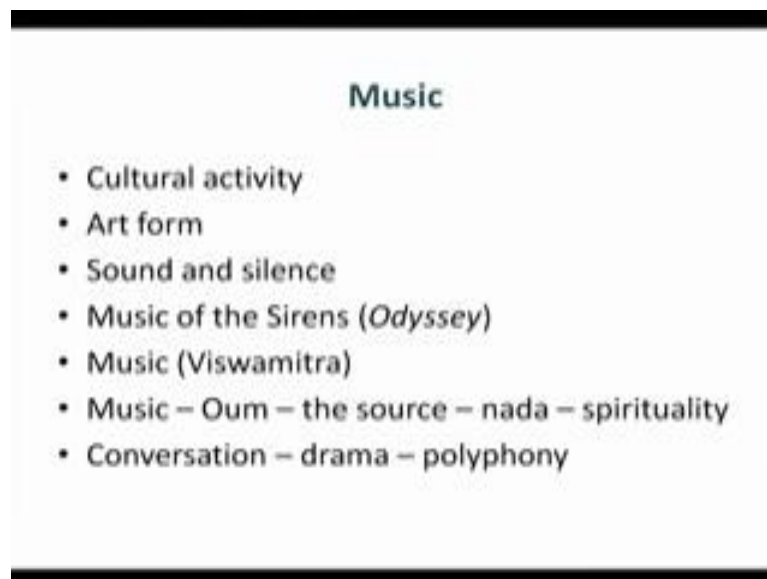
Let us the roaring of the sea coming from a broad set of areas or a voice which is coming from a specific direction. You have the tendency of filtering sound. You might find that a group of mothers are talking and chatting and the children are playing, one child starts crying and one mother gets up. Amongst so many children shouting and crying she is able to pick up that particular sound and able to identify that had that has the sound which is relevant to her.

So, filtering, the various things we talked about in the context of visual perception of will be relevant here also. Provides information about spaces I told you and sounds and colour are also very closely linked not just sounds and colour, when we talking about the music has a variety of wide associations which relate to colours which relate to images. Let us say that the moment I play certain thing you will say that this happens to be devotional music. In fact, we did such studies and found that most of the people when they associated the kind of music with devotionality came up with the images of temples of prayers of lamps being or worship and various other things. So, music very strongly evokes visual image as well. So, this is another different aspect another significant aspect of music which you find being distinctively used in the context of advertisements,

because in advertisements people very carefully select the kind of background scores that are being used because they kind of create an ambience for it.

Let me give an example; let say that you have an advertisement for let say a product of incense sticks for Pooja, imagine that a soft piano is playing behind it would that be except able to you or imagine a situation where you have a product like a let say perfume, axe perfume and behind that Bismillah Khan's Shahnayi is playing. So, you understand that this is very important. Now, if this thing happens then you suddenly realize that something has gone wrong until this happens you would accept it. So, the very fact the certain music pieces or certain musical approaches are compatible with certain things is something which we were taken for granted. The reason for having this particular lecture is to make you aware of the fact that these are all placed very carefully where people who know what they are doing. And if you are to make a presentation which is multimedia, which is going to make use of music then this is something which is going to be very significant.

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Certain aspects of music, music is a cultural activity very significant aspect of our culture the moment you listen to your music you can say that whether it is an Indian music, western music; within Indian music, whether it is popular music, whether it is a music for youth, whether it is music traditional music for older generation so on and so forth. Music is associated with different seasons, different periods of the day and night and you

find to different festivals have different kinds of music. For instance, in during New Year, there is certain kind of music is played, but during let say Durga Pooja, a certain other kind of music is played.

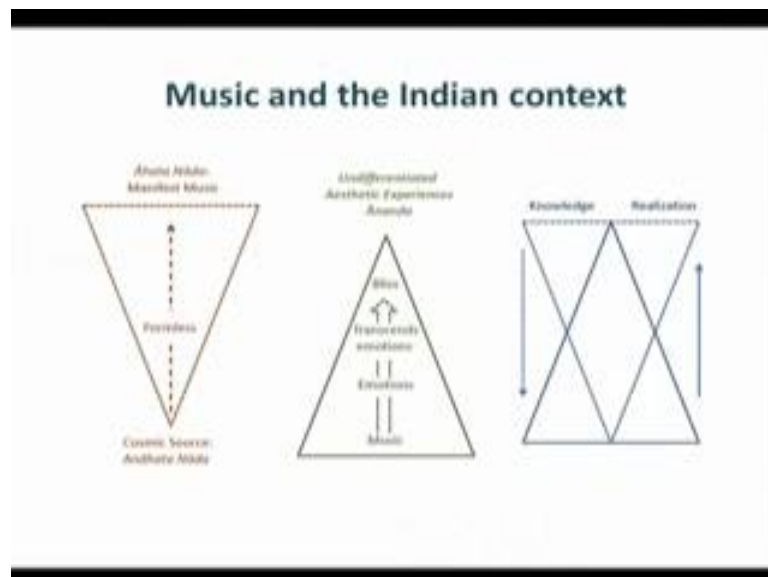
So, music is something which is (Refer Time: 08:32) within our culture of context and majority of youth culture is found of listening to music, not for itself, but while doing something else; like driving, like some going of dosing of for relaxing or may be when doing studies whatever it is. Now, sound and silence of course, are very important in our lives and sound and silence are something which together decide, whether something can be called music or can be called noise. If you have rhythmic sound, if your sound has certain features, it has certain kinds of pauses, and then you can think in turns of it being musical, because it has certain components, certain features.

Now, attributes which are emerging like a certain periodicity like something like, this has certain periodicity, but this periodicity can also associated with the driving of a nail by a carpenter, but along with that it can be more complex in which case you will find that it has something which approaches rhythm as in music, but if certain notes are associated with that gradually, it evolves moves in the direction of either a successful or failed music.

Music, a traditionally has been found to very influential because you see that if we take the example of from our own tradition of Viswamitra, (Refer Time: 10:07), Saint Viswamitra, then you find that he is very strongly meditating and cannot be distracted. Now, how is it that the Apsaras of heaven will be able to distract him if they have to be successful. They might dance, but dance is something which apparently is not audible, although you can hear the footsteps and that would not be good enough to disturb somebodies deep concentration. It has to be broken with something else which is much more let say seductive, much more persuasive, much more powerful music. So, we have the concept of ethereal music, music of Devas, music of the gods. So, even if you are looking at the tradition you have this. On your hand music is suppose to have as source elemental sound or Om which goes to unheard of sound or sound which is unheard into the root of nadha which happens to be the source of all that is audible including our speech as well as music.

So, if you are looking at western context on the other hand, music is something which has various dramatic qualities like; conversational qualities, one instrument is playing the other instrument is responding to that, that is playing simultaneously which is polyphonic. So, where you see that if you are looking at opera, if you are looking at different kinds of symphonies then you will find that a lot of musical, let say instruments are playing together or they are conversing amongst one another and these are other dimensions of music, where you see that the entire process of socialization it was metaphorical presented. So, this particular kind of a strategy across a particular period of time go through simultaneity as well as discreteness both across specific moments in time as well as in terms of sequence where one response to the other.

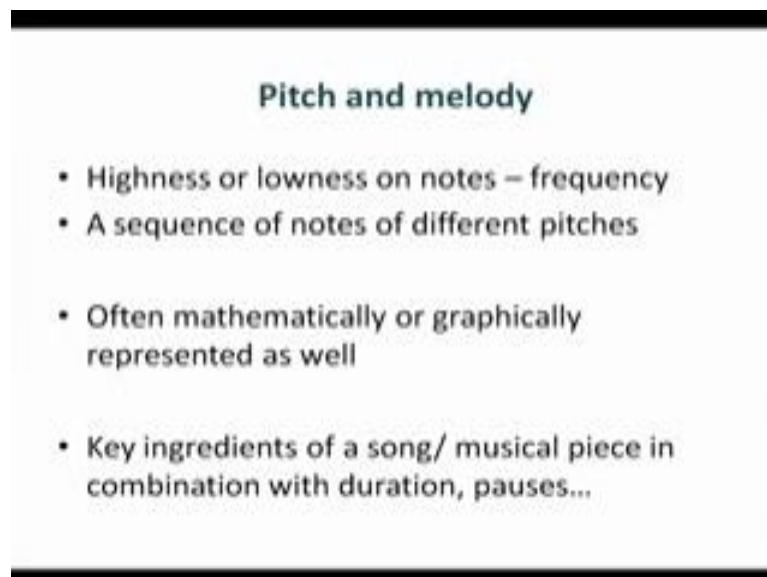
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If we are looking at the Indian traditional context which is something, which is relevant for us obviously, we start of with ahata nada to anahata nada; anahata nada is that is that which is unmatched (Refer Time: 12:26) sound the root of all sounds and from that cosmic source is manifested sound music, the principle of a speech and the world. In fact, we say that from the word to world immersed from music from sound world immersed and you see that as an esthetic experience in the Indian context you start off with music and as you go deeper into Indian classical music due to the more contemplative and reached the state of bliss.

The reason for talking about this is because this associates the music with the concept of emotions and of esthetic emotion and emotion and music is significantly linked and has relevance in the social cultural context of advertising a persuading people in different ways as well. And you see that when you develop a knowledge or realization of how music works you are able to make effective use of it. So, you see that you experience music and then you know how that experience actually happens then you are able to use music in a more meaningful way. So, we will talk at a very basic level I have got some of these things, we will do a set of surveys with you where we will share. We are going to just now you can do those surveys we are sharing certain aspects of music with you and together we will learn few other things about music as well.

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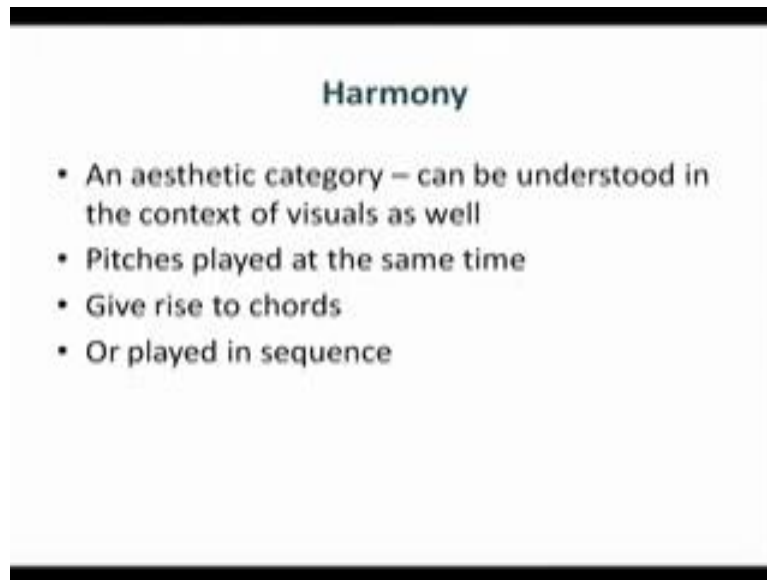


Pitch and melody

- Highness or lowness on notes – frequency
- A sequence of notes of different pitches
- Often mathematically or graphically represented as well
- Key ingredients of a song/ musical piece in combination with duration, pauses...

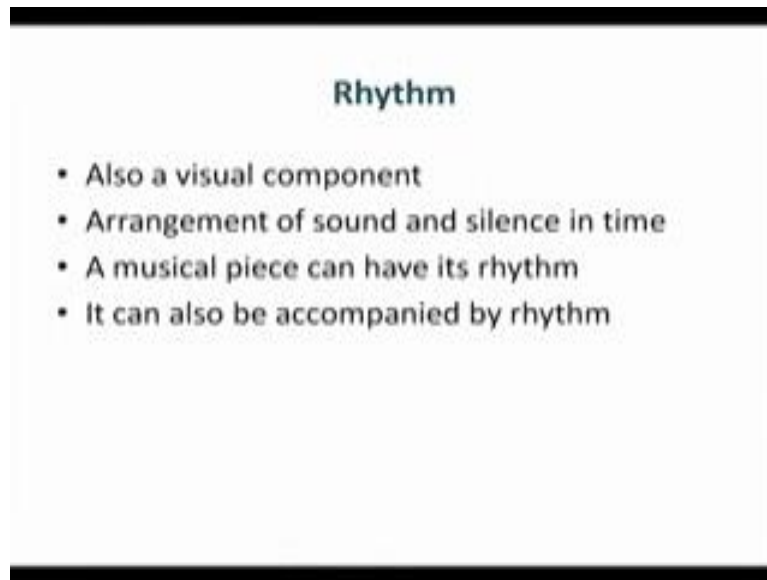
Now, if you are looking at some of the basic components of music; one of them would be pitch and melody. What is pitch? It is the highness or the lowness of a note, the frequency of notes. We very often talk about sa re ga ma and things like that I will also play one a in a moment from now when I discuss timber with you. So, that is the aspect we are talking about. A sequence of notes of different pitches presented in a systematic manner, in an organized manner, where there are clusters of relationships or repetitions can be considered a melody. These are often mathematically or graphically represented. These are happened to be the key ingredients of musical song, musical pieces, when they are combined with certain durations pauses and rhythm.

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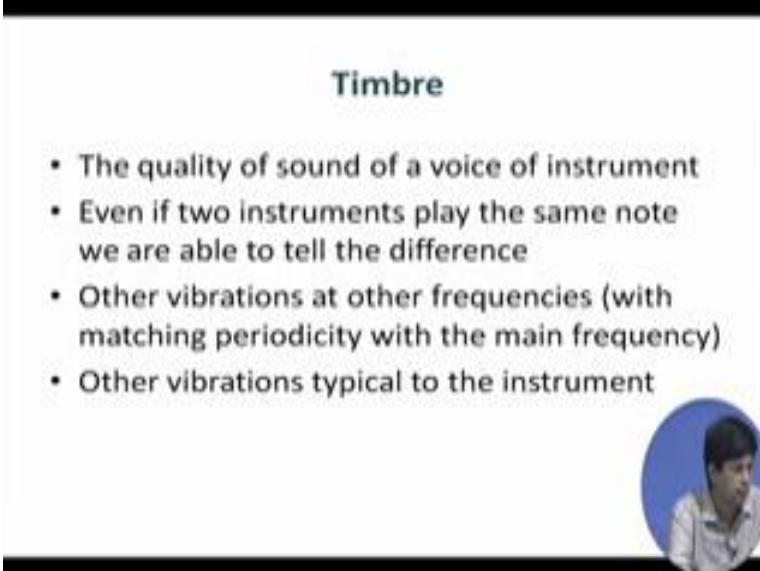
So, we have a basic working definition of what music is? We talk about harmony; harmony is where something is tolerable; something we can hear. Now, there are complex theories of harmonies, but we are not going to that and aesthetic category can be understood in the context of visuals as well certain colors are compatible certain colors are not. Pitches played at the same time which is very often known as chords, like you have chords like; major chords, minor chords, when you play the guitar and these generate harmonies when, either play simultaneously a number of notes to play together to form a chord or if the sequence of those notes of which the chord consists are played in that is a particular sequence they also give rise to sense of harmony. This harmony has chords; major chords generally are positive sounding or convey sense of joy and happiness. Minor chords very often convey a sense of a little bit of sadness and this is something which has almost been identified universally. Rhythm is something which we talked about.

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When we talked about equal gaps as in let say; tabla or drums also something which is very often found in visuals. And I will give an example towards the end of how rhythm and music and visuals are associated. Arrangement of sound and silence alternatively in certain manners; that is sound of the particular instrument has a (Refer Time: 16:21) silence of that particular instrument. Well other instruments are other voices are playing along. So, that is another thing. A musical (Refer Time: 16:38) piece can have it is rhythm, when notes and gap between the notes can have that (Refer Time: 16:43) and it can be accompanied by also rhythm as with a tabla. So, somebody is singing a song and some body is playing the table. The song has it is own rhythm, but the tabla has a more periodic definite rhythm, periodicity of sounds.

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Timbre

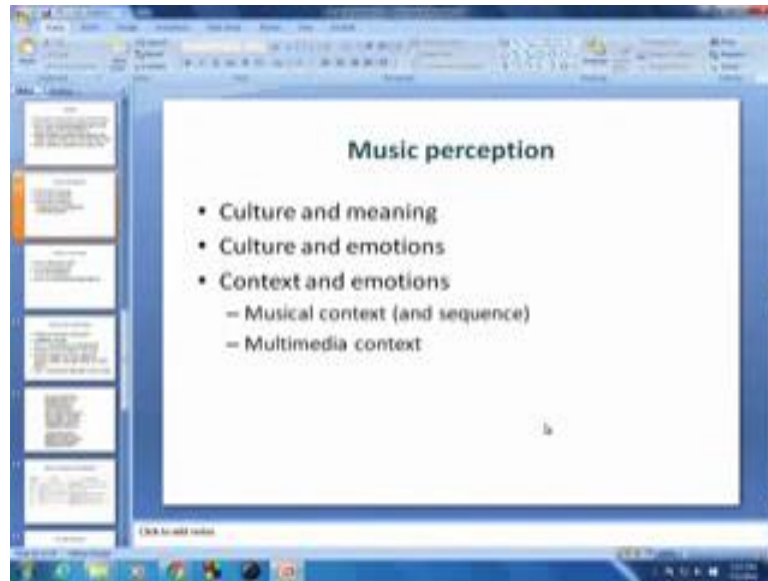
- The quality of sound of a voice or instrument
- Even if two instruments play the same note we are able to tell the difference
- Other vibrations at other frequencies (with matching periodicity with the main frequency)
- Other vibrations typical to the instrument



The timbre is something which is a where I will when I discuss this and give you an example I will be able to share with you how notes are played in sequence timbre is the quality or voice of an instrument let say why is it that Kishore Kumar was. So, popular and may be x y and z we are not very popular both of them played the notes correctly that is because the voice has the specific quality the moment you hear that voice you know that it is Kishore Kumar's voice or the moment you hear the sound of a particular instrument you know which particular instrument is playing. In spite of the fact that let say, the both the instruments are playing the same notes their sound different. We will not go into the technicalities, but we simply say that all within central frequency is the same. There are other associated frequencies which are different for different instruments and this gives rise to the typical vibration compound, which we perceive as their specific quality of that particular instrument of voice.

Now, what I am going to do right now is quickly take you to an example of timbre. I am playing an instrument over here now and you can hear another instrument over here now they are playing same set of notes and this also tells us about the notes like sa re ga ma pa dha ni sa and you find that this is where we were talking about pitch. Let us if I have notes of less frequency, lesser frequency and notes of higher frequency. So, what you find over here is that these manage to communicate different things that first one was santur and the second was violin. So, they have differences which are easily perceptible music and perception.

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You see that music perception, the way we understand perceive music depends on culture and meaning, how we associate that particular music in which particular context. Let say for instance, I have lot of difficulty when you see that bajans are played to the old film songs tunes, because sometimes old vajans are these days some people converted it into or play it along, the melodies or the tunes of film songs it is jarring because of a particular cultural association, that this is a film songs tune and that is being used for playing vajans or singing a vajan. Culture it is related to music perception is related to culture, it is related emotions, as I told you a little earlier, because they distinctively manage to communicate positive and negative emotions, and they have; obviously, have specific contexts. I have explained the context when I talked about advertising and music, and when we talk about the multimedia context. For instance, I can you tell that there can be sounds which are distracting; there can sounds which are compatible.

If you are looking at our mobile phones, why is that you pick up your own let us say a ringtones. Why is that ringtones of specific kinds are soothing, whereas certain other ringtones are very irritating. So, this choices and guessing which one would be, let say appealing for the majority of the people, is something which is very important. For instance these companies when they provide you with the preset of ringtones.

Actually I have tested it a lot on audiences, groups of different clusters of audiences. On audience and I have identified, that these are the most popular, these are the most effective, these cover the wide range of people and their likes and dislikes, and hence these will be successful. Sound is also associated with, let say getting a message, sending a message and all things. So, it triggers certain kinds of information, associated behavior. A particular sound conveying, or particular note conveying that message has come. A particular note conveying that message has gone so on and so forth. So, these are relevant in the context of music perception.

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Music in our lives - as I told you I have already hopefully managed to convince you that we listen to music, because it is a very important part of our lives, for the sake of enjoyment, for relaxation, but also as I have probably been able to share with you, in the context of multimedia, presentations, as well as various kinds of business context inviting, including advertisement as well as ambience.

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Music and multimedia

- Ringtones and other information
- Interaction sounds
- Role in intensification or dramatization
- Example of text animation...and music
- *The Sky*: Heebok Lee, Time Motion & Communication, Carnegie Mellon University, 2000)
- From "Renaissance," Edna Saint Vincent Milley

Now, if you are talking about music and multimedia, ringtones and other information, I have given you the example; interaction sounds, role in the intensification and dramatization of things. Let say that we for watching a movie, as the action quickens you find that the drum beats are quickening. So, for dramatization, and I will give you an example a little a later of, how music manages to convey something, which ordinarily would not be conveyed very powerfully. For example, here I take an example of a poem by Edna Saint Vincent Milley.

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But, sure, the sky is big, I said;
Miles and miles above my head;
So here upon my back I'll lie
And look my fill into the sky.
And so I looked, and, after all,
The sky was not so very tall.
The sky, I said, must somewhere stop,
And—sure enough!—I see the top!
The sky, I thought, is not so grand;
I 'most could touch it with my hand!
And reaching up my hand to try,
I screamed to feel it touch the sky.

I screamed, and—lol—Infinity
Came down and settled over me;
Forced back my scream into my chest,
Bent back my arm upon my breast,
And, pressing of the Undefined
The definition on my mind...

You find that a here is the fragment of the poem which I will read out to you, and then I will share it with you. But sure the sky is big, I said miles and miles above my head. So, here upon my back I will lie, and look my fill into the sky and so I looked. and after all the sky was not so very tall the sky, I said must somewhere stop, and sure enough I see the top, the sky I thought is not so grand, I almost could touch it with my hand, and reaching up my hand to try, I screamed to feel it, touch the sky, I screamed and low infinity came down, and settled over me, forced back my scream into my chest, bent back my arm upon my breast, and pressing of the undefined, the definition of mine on my mind. What basically been told is of an experience of a person looking at the sky, and considering it ordinary, and then suddenly realizing that it is extraordinary.

Now, this is something which you will find, having been covered, when we dealt with the text animations earlier, but when music is accompanied to that, what kind of a significant difference does it make; it is something which we will try to identify right now.

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So, I believe that makes it very clear, how distinctively different the experience is, when music is attached to that. Earlier use identified how the experience was very distinctive when, texts get animated, but add music to that and the experience is absolutely different.

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Structural Feature	Definition	Associated Emotions
Tempo	The speed or pace of a musical piece	Fast tempo: happiness, excitement, anger. Slow tempo: sadness, serenity.
Mode	The type of scale	Major tonality: happiness, joy. Minor tonality: sadness.
Loudness	The physical strength and amplitude of a sound	Intensity, power, or anger.
Melody	The linear succession of musical tones that the listener perceives as a single entity	Complementing harmonies: happiness, relaxation, serenity. Clashing harmonies: excitement, angst, unpleasantness.
Rhythm	The regularly recurring pattern or beat of a song	Smooth/consistent rhythm: happiness, peace. Rough/irregular rhythm: amusement, nervousness. Varied rhythm: joy.

So, music has a lot of role to play in the context of emotions and therapy. These are some of the features which I will just say quickly share with you. Speed or phase of music a very often communicates happiness, excitement, angers I have when it is fast, and when it is slow sadness and serenity. We will just look at a couple of demonstrations of this, and you see that, we talked about majors scale, major tones, major chords happiness, minor chords sadness, loudness and intensity melody, where something is being complemented, harmonies simultaneously, two things happening rhythm the regularity of pattern of beats.

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Our key findings

- Indian Music distinctively conveys emotions
- These emotions are dominantly calm, or sad
- The music that follows the next music manages to modify how we perceive it
- Music is linked to colors and forms in terms of emotions
- The same music, slow vs. fast convey different emotions and meaning...

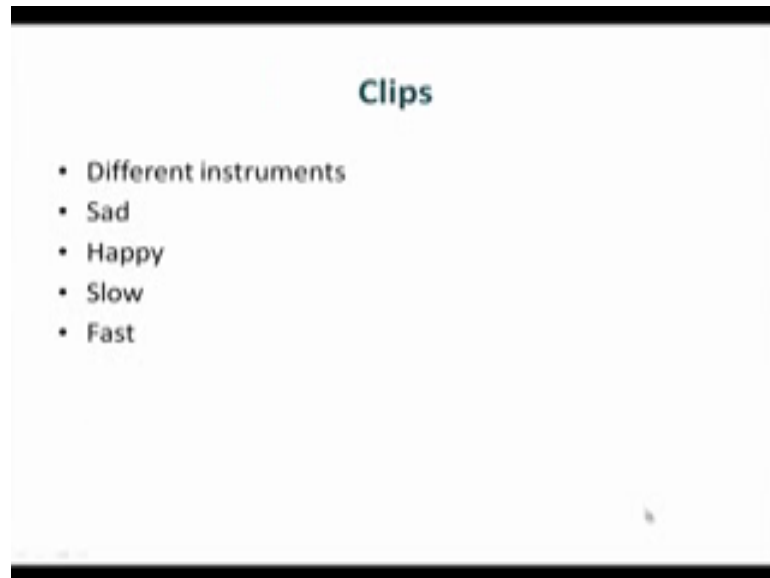


So, before we move on to some of the other things what I would like to share with you, are few clips which illustrate some of these points, a certain clips which we have been working with, and where we have found that there are certain relevance in the context of research, as well as in the context of, what we are learning in the context in communication and in soft skills. Now what I will start off with is a track from Pandith Hariprasad Chourashiya where you will find that in two different places, the kind of emotion conveyed will change. You will find that at this point of time, the element of sadness is were fairly distinctive, on the other hand we pause and we move towards the end and you find that the meaning of the music, is very different although the notes are similar, and are being played in a similar manner, because of the speed of the tempo. So, you see that, a tempo changes the meaning of things, as I said and you find that in music is capable of conveying both happy as well as sad emotions.

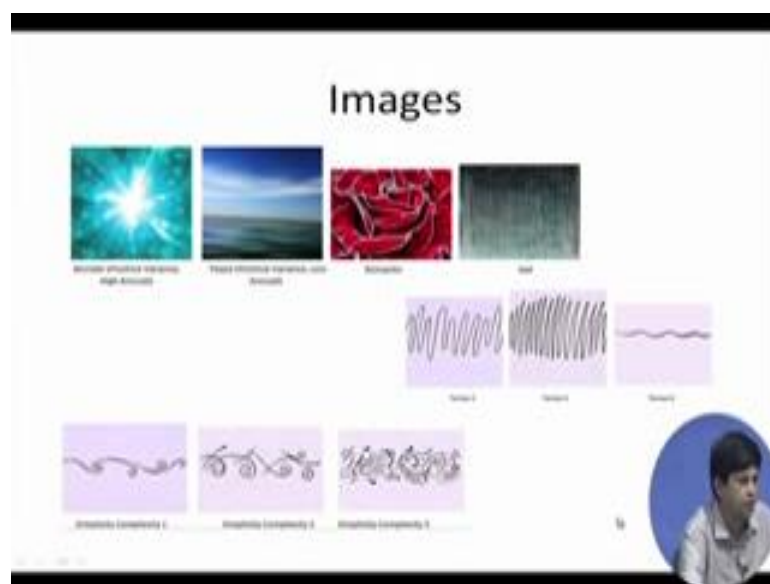
For instance, if you are looking at this, you will find that a manages to communicate emotions of happiness, of romance, that is what our studies have identified whereas, a same set of notes communicates something entirely different, without the acoustic dimension we have rhythm, and when there is certain (Refer Time: 29:22) slowness to a particular thing, happy, sad, more happy, less happy, romantic so on and so forth the meanings keep on changing. So, what I wanted to share with you friends is that, these examples which I will quickly share with you, last few points that, a music is something which dominantly in Indian context.

We did a survey with more than 1000 people and we found that it is dominantly convey communicating a sense of calmness or mild kind of sadness, accompanied by calmness and these can have very distinctive therapeutic implications. They can also have cultural implications as we discussed, and in general we find that music which follows one another let say that if I am listening to happy music and then I listen to sad music, sad music seems to be much more sad. Music is also linked to colours and this is something which I will quickly share with you.

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You find that, in a study where we wanted people to associate music with the other dimension, which is the visual dimension. We found that these particular clips were associated; these images were associated with particular kinds of musical clips. Romantic musical clips were associated with, this image without romantic being written below it, sad music clips were associated with this tranquil and peaceful were associated with this particular image. In the same way, speed was communicated through these graphic representations so people also picked up these accordingly and the complexity of rhythm and the total music a piece was also rated accordingly.

Now, what this tells us is that, we are able to relate at some level, music with visuals music with colours and this is very important for us, because when we have them in contrast, they create a different kind of a meaning, when we have them together they created entirely different kind of meaning. And these can have various interesting implications, as we try to apply them to our presentation context and various ambiances where music can heighten, perception heighten the effect of good communication as well as manipulate people.

For instance, it was a study found that in a particular shop, when they started using a particular kind of music they sell of the particular shopping in increased significantly, because this music conveyed a particular cultural value to the group of people. So, this people got attracted to this particular shop and then started buying from there. I hope that this session has been interesting, slightly different, slightly of a different nature, not immediately linkable to soft skills, but I have a feeling that you can make use of it in a meaningful way.

Thank you very much.